



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80E1A1 BYPASS RATIO: 5.1
 UNIQUE ID NUMBER: 1GE032 PRESSURE RATIO (π_{00}): 32.4
 COMBUSTOR:
 ENGINE TYPE: TF RATED THRUST (F_{00}) (kN): 281.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	15.7	61.9	59.1	11.4
AS % OF ORIGINAL LIMIT	80.1	52.5	56.3	63.8
AS % OF CAEP/2 LIMIT (NO _x)			70.4	
AS % OF CAEP/4 LIMIT (NO _x)			82.2	
AS % OF CAEP/6 LIMIT (NO _x)			92.6	
AS % OF CAEP/8 LIMIT (NO _x)			107.5	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.702	0.05	0.38	37.87	9.7
CLIMB OUT	85	2.2	2.199	0.07	0.34	27.11	6.9
APPROACH	30	4.0	0.714	0.14	1.70	9.84	0.0
IDLE	7	26.0	0.226	9.68	43.24	4.47	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			928	3463	15678	15429	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				12.1	54.4	53.7	9.7
SIGMA (D _p /F ₀₀ in g/kN, or SN)				5.0	8.8	1.1	2.7
RANGE (D _p /F ₀₀ in g/kN, or SN)				7.5-16.4	46.7-62.3	52.4-54.5	7.4-12.3

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.7-98
TEMPERATURE (K)	292-296
ABS HUMIDITY (kg/kg)	0.012-0.015

FUEL

SPEC	Jet A
H/C	1.89
AROM (%)	16.4

MANUFACTURER: General Electric Company
 TEST ORGANIZATION: CF6 Eval Engineering
 TEST LOCATION: Sites IIIC & IIID, Peebles Test Facility
 TEST DATES: 08/06/1992-04/08/1992

REMARKS

1. Ref GE Report R90AEB188.
2. Engine S/N's 810-101/1 and 810-104/1.

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)